

Claims

1. A reactive traffic calming device comprising a resiliently deformable enclosure containing air, air within the enclosure communicating with the atmosphere via a valve arrangement permitting the enclosure to be deflated under the weight of a passing vehicle and to re-inflate after passage of the vehicle, said valve arrangement comprising a pressure-sensitive valve adapted to remain open while the air within the enclosure is up to a first pressure threshold, thereby permitting deflation, and to close in response to pressure above said first pressure threshold, thereby preventing deflation in response to excessive vehicle speed.
2. A reactive traffic calming device as claimed in claim 1 wherein the pressure-sensitive valve comprises a first valve closure biased into a normally-open position and movable to a closed position, the air pressure within the enclosure impinging on said first valve closure to overcome said biasing means above said first pressure threshold.
3. A reactive traffic calming device as claimed in claim 1 or claim 2 wherein the first valve closure comprises a member having a shaft portion mounted to slide within a bore, and a broader, head portion responding directly to the air pressure.
4. A reactive traffic calming device as claimed in claim 3 wherein the biasing means comprise a coil spring surrounding the shaft portion and acting against the head portion.
5. A reactive traffic calming device as claimed in any preceding claim wherein the valve arrangement comprise means defining a sensing chamber surrounding the first valve closure, said inlet chamber communicating with the air within the enclosure via a restricted air inlet.

6. A reactive traffic calming device as claimed in claim 5 wherein the restricted inlet may be arranged so as to direct air in a jet directly at the closure member.
7. A reactive traffic calming device as claimed in any preceding claim wherein
5 the valve arrangement may further comprise a second valve, normally closed, arranged so as to open and allow rapid deflation of the device in response to pressure exceeding a second pressure threshold, greater than the first pressure threshold.
8. A reactive traffic calming device as claimed in claim 7 wherein the second
10 valve may comprise a second valve closure movable, against second biasing means from a normally closed position to an open position.
9. A fluid flow control valve arrangement comprising at least a first and a
15 second valve wherein the first valve includes a first valve closure, movable against a first biasing means from its natural open state to a closed state, and wherein the second valve includes a second valve closure, movable against a second biasing means from its natural closed state to its open state such that the application of fluid pressure on the control valve assembly below a first lower threshold level or above a second higher threshold level allows a flow of fluid through the valve arrangement
20 but an application of fluid pressure on the control valve between said first and second threshold levels allows substantially no fluid to flow through the valve arrangement.
- 10 A fluid flow control valve as described in claim 9 wherein said first and
25 second valves are contained within a body housing defining a fluid inlet and fluid outlet.
11. A fluid flow control valve as described in claim 10 wherein the second valve closure comprises a generally annular member, the periphery of which co-operates with an annular seat of the first valve, and which defines a central passageway

incorporating the first valve closure, the latter being operative to open or close the passageway as the case may be.

12. A fluid flow control valve as described in claim 1 or claim 2 wherein said
5 biasing means are compression springs.

13. A fluid flow control valve as described in any one of claims 10 to 12 wherein
the body is preferably generally cylindrical with the fluid inlet and fluid outlet being
located at opposite ends thereof.

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14. A fluid flow control valve as described in any one of claims 10 to 13 wherein
a filter element is located at the outlet.

15. A fluid flow control valve as described in any one of claims 10 to 14 wherein
15 the inlet is annular shaped with a diameter substantially smaller than the outlet so as
to form a jet.